

Surface Mount Oscillator



The XOSM-572 series is an ultra miniature package clock oscillator with dimensions 7.0 x 5.0 x 1.5 mm. It is mainly used in portable PC and telecommunication devices and equipment.

FEATURES

- Miniature Package
- Tri-state enable/disable
- HCMOS compatible
- Tape and Reel
- IR Re-flow
- 2.5 V input voltage
- 100 % Lead (Pb)-free and RoHS compliant

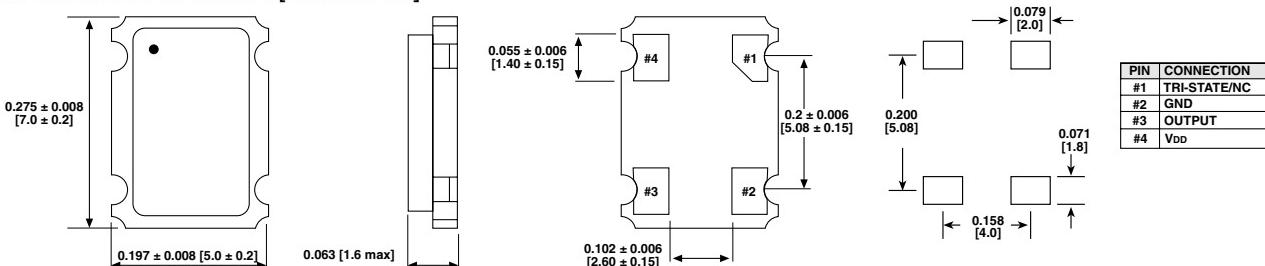

**RoHS
COMPLIANT**

STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XOSM-572
Frequency Range	f_o		1 MHz ~ 100.000 MHz
Frequency Stability*		All Condition*	$\pm 25 \text{ ppm}$, $\pm 50 \text{ ppm}$, $\pm 100 \text{ ppm}$
Operating Temperature	T_{OPR}		0 °C ~ 70 °C (-40 °C ~ +85 °C option)
Storage Temperature Range	T_{STG}		-55 °C ~ +125 °C
Power Supply Voltage	V_{DD}		2.5 V ± 10 %
Aging (First Year)		25 °C ± 3 °C	± 5 ppm
Supply Current	I_{DD}	1.000 MHz to 23.999 MHz 24.000 MHz to 49.999 MHz 50.000 MHz to 69.999 MHz 70.000 MHz to 100.000 MHz	12 mA Max 15 mA Max 20 mA Max 30 mA Max
Output Symmetry	Sym	At 1/2 V_{DD}	40/60 % (45/55 % Option)
Rise Time	T_r	10 % V_{DD} ~ 90 % V_{DD}	7 ns Max
Fall Time	T_f	90 % V_{DD} ~ 10 % V_{DD}	7 ns Max
Output Voltage	V_{OH}		90 % V_{DD} Min
	V_{OL}		10 % V_{DD} Max
Output Load	HCMOS Load		30 pF Max
Start-up Time		T_s	10 ms Max
Pin 1, tri-state function			Pin 1 = H or open.... output active at pin 3 Pin 1 = L..... high impedance at pin 3

* Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration.

DIMENSIONS in inches [millimeters]



***note: A 0.01 µF bypass capacitor should be placed between V_{DD} (Pin4) and GND (Pin2) to minimize power supply line noise

ORDERING INFORMATION

XOSM-572 MODEL	B FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm)	R OTR Blank = Standard R = -40 °C to +85 °C	E ENABLE/DISABLE E = Disable to Tristate	50 M FREQUENCY/MHz	e4 JEDEC LEAD (Pb)-FREE STANDARD
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GLOBAL PART NUMBER

X	O	2	7	C	T	E	C	N	A	5	0	M
MODEL	FREQUENCY STABILITY	OTR	ENABLE/ DISABLE	PACKAGE CODE	OPTIONS	FREQUENCY						

GLOBAL PART NUMBERING

MODEL NUMBER	FREQUENCY STABILITY	OPERATING TEMPERATURE (OTR)	ENABLE/ DISABLE	PACKAGE CODE	OPTIONS	FREQUENCY
XO53 = XO-53 XO54 = XO-54 XO34 = XO-543 XO52 = XO-52 XO32 = XO-523 XO56 = XO-56 XOVC = XOVC-23 XO5M = XOSM-52 XO63 = XOSM-533 XO62 = XOSM-532 XO61 = XOSM-531 XO57 = XOSM-57 XO37 = XOSM-573 XO27 = XOSM-572 XO17 = XOSM-571 XO55 = XOSM-55 XO35 = XOSM-553	C = 0.01 % (100 ppm) D = 0.005 % (50 ppm) E = 0.0025 % (25 ppm)	T = 0 °C to + 70 °C R = -40 °C to + 85 °C	F = Pin 1 Open E = Disable to Tristate	TAPE AND REEL H = RF7 BULK A = B04 (XO63, XO62, XO61) C = D06 (XO57, XO37, XO27, XO17) D = D07 (XO53, XO54, XO34, XO56, XOVC, XO55, XO35) L = D08 (XO52, XO32, XO5M)	NA = No Additional Options 60 = 45/55 Symmetry Contact factory for all other options	4M = 4 MHz 40M = 40 MHz 100M = 100 MHz 12M288 = 12.288 MHz M is used as decimal place holder in frequency

Example: XO52CTELNA40M



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